



SCIENCE INFORMATION SYSTEMS NEWSLETTER

*Feature*

## ***Multicast Pioneering Work Featured in LAN Times***

### ***Christine Falsetti, Internetworking Technologies, Ames Research Center***

Ames Research Center was featured on the front page of the February 3 issue of *LAN Times* for sharing its pioneering networking work at the January Internet Protocol Multicast Initiative (IPMI) educational forum in San Jose, California this past January. The use of emerging multicast technologies to transmit data more efficiently across the increasingly crowded Internet was discussed by over 300 vendors and users at the forum. NASA is a charter member of the IPMI and was the first government agency to join the initiative. NASA is one of the leaders in multicast development and is well positioned to help educate potential users about the choices available.

Multicasting offers a potential solution to bandwidth congestion by conserving bandwidth. It does so by distributing a single stream of data that can be accessed by those requiring the data rather than by sending an individual copy of a message to each requester as is done in "unicasting." Multicasting may benefit private intranets as well as the public Internet.

NASA plans on fully utilizing multicast technologies in such future projects as telemedicine (building on earlier successes),

distance learning (Internet in the classroom, virtual flight simulator), telescience (Marsokhod rover, Antarctica, biocomputation), virtual aerospace environments (remote wind tunnel operations, remote simulator support) and daily workflow (project collaboration among remote sites, reduced travel costs, improved project efficiency). NASA will work closely with members of the IPMI to help expedite the development and deployment of Internet protocol multicast technologies.

For further information access:

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